W5YI

National Volunteer Examiner Coordinator

REPORT

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★ *In This Issue* ★

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Net Users, Managers Sound off to FCC on 20 Meter Fiasco

At presstime the FCC had received 41 responses to its wide- ranging HF Letter of Inquiry, which looks into unlawful or excessive third-party traffic, phone-patch, CW training and bulletin operations on the 20 meter band. In October FCC Special Services Division chief Robert McNamara sent the letter to 19 hams and organizations believed to be involved in the high-pressure disputes over these different usages of the band.

The letter was prompted by escalating complaints from U.S. and foreign hams and congressmen about the situation. McNamara stated in the letter that amateur self-regulation and cooperation have not worked and that the Commission is looking to other alternatives. The unusual alternatives he mentioned included suballocations for third-party traffic ...or even outright bans on such traffic.

We published the letter in full in our Nov. 1 issue. Since it was mailed, the letter has circulated beyond the original 19 recipients to worldwide distribution through computer and packet nets and on-air readings ...as well as in print.

The responses contain wildly varying accounts of the situation. At one extreme, some commenters believe that no problem exists. Others plead for rule changes and rapid FCC enforcement to stem flagrant rule violations that threaten the total destruction of the service. The majority believe nets and patches are useful, that the benefits outweigh the drawbacks, and that a handful of lids are ruining the fun for everybody else.

Vigilantes and broadcasters

At the center of attention are two amateurs. One is ***Herb Schoenbohm/KV4FZ*** of St. Croix in the Virgin Islands. Schoenbohm's transmissions drew numerous protests to V.I. and federal officials. The letters accuse him of jamming communications with bizarre lectures over the propriety of messages and patches.

Colombian amateur ***Erik Fog/HK3IGH*** told the FCC that Schoenbohm broke into a QSO to charge HK3IGH with being a member of the Medellin drug cartel. Another ham said that personnel at FCC monitoring stations told him they are "...frustrated and demoralized" over lack of Washington attention to their documented cases against KV4FZ and his followers.

The decades-old 20m nets say they have had to QSY away from 14.313 MHz to escape Schoenbohm. They report that fortunately, the movement of the nets from 14.313 to 14.300 has reduced the QRM from those stations who blasted the phone patches and other traffic that they perceived as illegal. Some of those stations have grouped into a *"Better Amateur Radio Federation"* (BARF) and now operate their own net on 14.313.

The other ham in the middle of the dispute is ***Glenn Baxter/K1MAN,*** manager of the International Amateur Radio Network (IARN) in Belgrade Lakes, Maine. Baxter's daily, multiband broadcasts are often cited as repetitious spectrum wastage instead of

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legitimate amateur news bulletins. His letter of response urges the FCC not to get involved in any of the problems but to rely on "market forces" instead.

ARRL affected

The ARRL has a stake in the outcome of the disputes. Since time immemorial, Maxim Memorial Station W1AW has transmitted bulletins and CW practice. The station was even heard at the start of World War II, advising amateurs to close down their stations as the government requested. Pursuant to certain §Part 97 restrictions, the League is able to legally pay W1AW operators for this service. ARRL recently spent hundreds of thousands on W1AW plant upgrades.

Yet, the W1AW investment and tradition might be threatened if the FCC were to move to reduce or prohibit bulletin and code practice. The Commission has not directly said it would take such action, but McNamara's letter asks probing questions about whether phone bulletins and on-air CW practice are still necessary in today's digital world.

If there is any consensus among the responses received at the FCC, it is that operations such as the Intercon and Maritime Mobile nets serve valuable functions and should be allowed to continue as they are. Amateurs told the FCC that the nets are saving lives, reuniting families, making life more bearable for overseas military personnel ...and providing much satisfaction for the participants who volunteer their time.

Most commenters rejected the FCC's implication that large amounts of spectrum are being taken up with questionable third-party traffic. Although they conceded that some improper communications are going on, net managers stressed that individual stations are responsible for the traffic they handle, often away from the net frequency. Other commenters allege that 20m phone-patching has degenerated into a massive commercial toll-bypass operation for the benefit of yacht owners and quasi-church activities.

FCC on the 20 meter controversy

We asked ***William Cross,*** FCC Personal Radio Branch program analyst, about what the FCC may do on the HF situation: "With this HF inquiry, we will try to determine if we do have a problem, or if this a dispute that the amateur fraternity should itself solve. If there is a problem, is there something we can do about it? "

"It might be enforcement, rulemaking, clarification of existing rules, maybe making new rules."

"The Bureau does care about this issue, particularly with the amount of time we are dealing with enforcement, monitoring, Congressional inquiries, letters, and phone calls on it. The staff will prepare an item. It could be a *Notice of Inquiry* or *NPRM,* to solicit comments. We're shooting for the end of the year. However, once the Private Radio Bureau finishes the item, it goes to the Commission. We have basically a new Commission and they have a full plate of matters they have to deal with so we don't know when they will take it up."

"We want to find a way to get 20 meters so that it's not anarchy. As a practical matter it looks like 14300-14350 is where the problems are going on. We have an obligation to those operators who have access to these frequencies, to return the frequencies to the Amateur Radio Service and see that these problems stop."

Excerpts from Letters

This report would not be complete without some direct quotes to give you a flavor (or perhaps a strong dose!) of what the FCC is reading in its bulging letters file.

Bulletins

- "ARRL believes there is no room in the crowded amateur HF telephony bands for lengthy one-way transmissions on a regular, quasi-broadcast basis. Information bulletins by definition must be confined to factual matters, not matters of opinion. They must be intended to inform rather than to entertain. ...The League believes that present rules are adequate to curb abuses...though increased enforcement efforts in limited cases would be a deterrent to abuses."
- Christopher Imlay/N3AKD, counsel, and John Lindholm/W1XX, W1AW trustee, ARRL

- "I can see no reason to restrict all ham news broadcasts to CW or packet. The ARRL's ham radio news in Morse tends to be technical, uncontroversial, and incomplete. The fuzzy and muddy issues are never mentioned. Perhaps they cannot

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER? | "I am a currently licensed Extra Class amateur radio operator and

afford to lose members through controversy and thus they stay out of much of the mainstream."

- Michael Clements/K7KHQ, Limassol, Cyprus

● "Asking if such transmissions are necessary or desirable is akin to asking if any radio or TV programming is needed in the public sector. The non commercial nature of amateur programming is akin to public educational TV... I don't feel that [ARRL] bulletins are as useful as ours and I would welcome more competition."

- Glenn Baxter/K1MAN, Belgrade Lakes, Maine, International Amateur Radio Network

Patches

● "Thousands and thousands of our military people have kept in touch with their families on this net. Persons in distress in this hemisphere whether on land or sea, have known for years that when they get in difficulty, they can come to our nets for help. Life-saving medical assistance has been given many times on this frequency... The arrival of KV4FZ on our net threw everything into a mess. Why one man was allowed to foster so much hatred between hams of all countries is indeed a deep mystery. His claim of illegal patches, baby selling, gun running, drug traffic is only designed to draw attention to himself, and these claims cannot be substantiated."

-Walt Donner/KA8O, Venice, Florida; Manager, Maritime Mobile Service Net

● "All phone patching within the boundaries of the continental United States should be eliminated. The tariffs we have today are very moderate and anyone who lives in our country and wants to speak with someone in our country should use commercial services. International phone patching should be limited to ten minutes and be on an allocated frequency for this purpose."

- Henry Luhrman/W4PZV, Lake Clarke Shores, Florida; ARRL Interference Reporting System Observer

● "I do not believe that all amateurs should lose the pleasure and benefit of phone patches properly conducted within rigidly enforced existing rules, because of abuses carried on by a relatively small number of stations... We feel we may have been unjustly accused by a few ill-informed individuals, more by innuendo than by facts, simply because we are boaters or interested in boating and therefore seem to assume a taint of 'guilt by association' because the nets under attack on 20m also have some boaters involved in them."

- Calvin S. Phillips/W1MDM, Marathon, Florida; Manager, Waterway Net (7268 kHz)

● "If the Commission would impose meaningful sanctions on those that use the amateur spectrum as an alternative to common carrier, marine and international telephony, there would not be a dispute. ...[T]he Commission's refusal to seriously enforce the law has opened the flood gates for spectrum anarchy to prevail on the amateur bands. To threaten those that are holding frank discussions of the issues is wrong, wrong, wrong! ...My advice to your agency, since it has been solicited, is to stay out of the Constitutional minefields of free speech..."

- Herbert Schoenbohm/KV4FZ, Christiansted, U.S. Virgin Islands

● "The Commission may easily ascertain that both foreign and domestic common carrier services are being deprived of revenue amounting to several million dollars per annum, and that the primary beneficiaries are U.S. missionary and yachting interests."

- William T. Gasell, WB8GDP, Jackson, Tenn.

Interference with nets

● "Some time around 1987, the net began to be harassed on an almost daily, sometimes continuous hourly basis by a group of self-styled enforcement people with no authority, to such an extent that the net was recently moved, after 23 years, to its present frequency of 14.300 MHz. The countless thousands of maritime and deployed personnel are still being serviced, and they often show their gratitude with a friendly 'well done'."

- Stanley Cohen/WD8QDQ, Cincinnati, Ohio; Public Relations Officer, Maritime Mobile Service Net

● "I submit to you that your office has been duped by all involved. I submit that the real issue is nothing more then a spat between wayward amateurs over use of a given frequency, and that they have with knowledge and forethought provided your office with a highly distorted picture of the situation.

I further submit that, the alleged massive illegalities do not now exist, never have existed, and probably never will. I also submit that taxpayers' monies are being wasted on a situation that is no more than a long running personality conflict; a situation that the FCC cannot hope to solve."

Novice course. Cost: $19.95 plus $2.00 shipping. New Part 97 Amateur Radio Rules included FREE. Order shipped the same day order is received. W5YI; P.O. Box #565101; Dallas, Texas 75356.

...ified - and explanation why answer is correct. Technician/General ...ne manual covers both 3A and 3B). Advanced (4A) Extra Class (4B). Cost: $5.95 each plus $1.50 shipping/handling. W5YI Report; P.O. Box #565101; Dallas, TX 75356-5101

"Tampering with the amateur rules to placate the demands of a few malcontents would, I think, be the final straw. It would start a confrontation between the overall amateur community and the advocates of net operations of such magnitude that there would be no way for the FCC, by regulation or direct intervention, to put out the fire. It would become the kind of a financial drain on the meager resources of the Commission that could not be endured, but one that the Commission would be obligated to endure.

I urge you to instead use the powers of enforcement you now have, especially that of 'monetary forfeiture' to the fullest, and, direct this enforcement against the small number causing the problem to begin with. This is the fairest, most equitable method, and also the solution which is the most cost-effective."

"Rather then waste your resources on this meaningless personality conflict, we would like to see a more responsive FCC in cases of malicious interference such as the case in regard to the recent California earthquake. No lives are at stake in the 14.313 personality conflict. Lives did hang in the balance in the wake of Hurricane Hugo and the California quake."
- Bill Pasternak/WA6ITF, Saugus, California; Amateur Radio Newsline Inc.

- "In my opinion, no regulation would be preferable to more regulation. The FCC is obviously unable to enforce current regulations concerning malicious interference anyway - so why add insult to injury by adding more rules to those which are currently ineffective. The problem on 14.313 MHz has solved itself... KV4FZ's antenna and house blew away in Hurricane Hugo - what goes around, comes around, right?"
- Michael H. Endres/WH6J, Kula, Hawaii; Assistant Manager, Seafarer's Net

- "Ignore the issues ...and you may wake up some morning and find yourself in bed with United Parcel Service on 14.313."
- Ron Rendleman/K9OEC, South Elgin, Illinois

ZONING BOARD, HAM ...CROSS SIGNALS

The Pueblo West (Colorado) zoning board appears to have taken it upon themselves to remove all amateur radio operation from their community ...even though it makes provisions for Citizen's Band and TVRO antennas. All twelve amateur radio operators have recently received citations and given ten days to remove all amateur equipment from their property. It all started with an incident involving retired engineer, ***Charles R. Landers, W5QZS,*** 67 of Pueblo West, Colorado.

Landers was ordered to remove his three amateur antennas from his property after neighbor, John Wyman, complained of telephone interference. His antennas are on two television masts attached to his house ...and a Butternut ground-mounted vertical in the center of his back yard. Furthermore, his remaining amateur equipment may not even be stored at the residence. Landers who has lived all over the world (his mongrel dog is from East Africa) recently returned to his native Colorado to retire ...and live out his days enjoying ham radio.

The *Pueblo West Committee of Architecture* (COA) which serves as the zoning board for the area has ruled Landers "...a public nusiance" and labelled his antennas as being "...not aesthetically pleasing." Wyman sits on the five-member architectural board. The tallest antenna is only twenty-five feet high.

Landers said his trouble began when three of Wyman's dogs attacked his dog. After a second attack, Landers called the animal shelter ...dogs can not run loose in Pueblo County. Soon afterwards, the interference complaints began. Interestingly, no other neighbor has experienced any TVI or telephone interference ...and many live closer than Wyman who is 150 yards away.

Wyman denies it was he who made the complaint to the Committee about Landers' operation but won't reveal the identities of those who did. A news reporter from the *Pueblo Chieftain* canvassed the area and conducted an interference survey. He verified no other neighbors were having a TVI or telephone problem.

Lander's points out that if his radio antennas do not meet aesthetic standards ...neither should Wyman's backyard satellite dish. An offer made to Wyman by the local *Pueblo Amateur Radio Club's* TVI committee to assist with the alleged telephone interference was declined. Reportedly, Wyman's wife said the interference did not exist and all RFI testing has been refused.

Recently, Landers was delivered a formal complaint from the COA stating that he had placed amateur

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radio antennae on his property without approval from the *Pueblo West Committee of Architecture.* *Section A:1* is being applied which prohibits buildings, fences, patios or other structures [to] be erected, altered, added to, placed or permitted..." without COA approval. *Section D:9* prohibits "...noxious or offensive activities ...which may become an annoyance or nuisance to the neighborhood" (this has really ticked off the Pueblo Amateur Radio Club); *Section D:13* requires that "storage of ...materials ...or other items that shall in appearance, detract from the aesthetic values of the property ...be concealed from view."

General guidelines applying to Citizen's Band antenna variances do exist, but they refer only to roof or end-of-the-house mounting with a base not to exceed 2-inches in diameter. Another neighbor (Robert L. Shrum, an architect and not a ham) said the guidelines where just that - they were not regulations and unenforceable. Shrum maintains that the *Pueblo West Declaration of Reservations* do not cover radio and TV antennas *which are specifically excluded.* He has sided with Landers' and is assisting him in his fight. Shrum called "...the Architectural Committee ...the wildest and most irresponsible group I have ever heard of." Furthermore, Landers' antennas are short-wave amateur radio and not CB.

The request for variance was denied even though the *Pueblo West Metropolitan District,* of which the housing tract is a part, examined and approved the antenna installation and placement. They sent a letter to the COA prior their meeting stating "...the District has no objection to the approval of this variance."

The *COA Variance Report* reads "Charles Landers - multiple radio antennas denied on aesthetic basis and because of interference with electronic devices and telephones in the neighborhood." Landers' contends "...aesthetics are a judgement call" and no one has come up with any concrete evidence of interference ...or allowed it to be resolved. He is frustrated to say the least.

All area newspapers are closely following the story, including the *Pueblo West Horizon,* the *Pueblo West Eagle* and the *Pueblo Chieftain.* The *Horizon* reported many "...more blatant violations of covenants" and "...areas openly junky" have gone unenforced. Flag poles, commercial communications antennas and lighting standards also require variances, but somehow have escaped COA scruitiny. Landers' feels he is being unfairly singled out and has sent three letters (totally eight typewritten pages) to the *Architectural Committee* pointing out seventy-eight other Tract 331, Pueblo West violations.

A public hearing was held last week and a motion was made by the COA lawyer to institute legal proceedings against Landers if his antennas are not dismantled and all amateur radio equipment removed from his property. Landers says they are staying ...although he can not afford attorney fees and court costs.

Landers handled many Health and Welfare messages for people in the area during the recent earthquake in California and Hurricane Hugo, a fact pointed out by both the *Chieftain* and *Horizon* newspapers. It appears that everyone - except for the zoning board - supports Landers and the fine work he ...and other Pueblo amateurs are doing. We will keep you posted.

CLANDESTINE STATION SEIZED BY FCC

The FCC reports that another Brooklyn, New York, pirate broadcast station has been shut down and its equipment confiscated by the U.S. Government. The seizure of "WJPL" was the second seizure in recent months that made use of the Federal civil forfeiture statutes to close down unauthorized radio stations.

FCC investigators, with the assistance of U.S. Marshalls, conducted the raid on the evening of Monday, November 6, 1989. The station was located by FCC Engineers using mobile radio direction finding equipment. The unlicensed station "WJPL" operated on 91.9 FM from 1153 38th Street in the Borough Park section in Brooklyn on weekends in the late evening hours.

In July, the radio equipment of pirate "WHOT" located at 2085 West 6th Street in Brooklyn was seized and shut down by the Federal Government.

Unlicensed radio operation is a violation of Sec. 301 of the *Communications Act* and carries penalties of up to $100,000 and/or one year in prison. The U.S. Department of Justice is proceeding with civil action against the equipment and the unlicensed radio operators. The FCC said they hope this sends a message to future would-be pirate broadcasters.

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December 1, 1989

OCTOBER VE PROGRAM STATISTICS

October	1987	1988	1989
No. VEC's	*18	*18	*18
Testing Sessions	349	465	512
VEC	1987	1988	1989
W5YI	31.2%	33.3%	41.4%
ARRL	38.1	44.1	35.2
CAVEC	6.9	5.6	5.7
DeVry	5.2	5.2	5.7
Others	18.6	11.8	12.1
Year-to-Date Sess:	3577	4054	4540
Elements Administ.	5858	6758	7454
VEC	1987	1988	1989
ARRL	49.3%	52.6%	44.0%
W5YI	24.0	27.5	31.8
CAVEC	5.7	4.9	6.4
DeVry	4.2	3.6	4.5
Others	16.8	11.4	13.3
Year-to-Date Elem.	67132	75946	80598
Applicants Tested	3418	4155	4613
VEC	1987	1988	1989
ARRL	47.9%	52.5%	42.9%
W5YI	24.3	27.6	32.5
CAVEC	5.7	4.5	5.6
DeVry	4.2	4.2	5.2
Others	17.9	11.2	13.8
Year-to-Date Tested	41645	45490	48265

October	1987	1988	1989
Pass Rate - All	58.9%	59.6%	62.0%
Pass Rate - W5YI	57.0%	51.8%	54.4%
Applicants/Session	9.8	8.9	9.0
Appl./Session W5YI	8.3	7.3	7.0
Elements/Applicant	1.7	1.6	1.6
Sessions Per VEC	19.2*	25.8*	28.4*

Administrative Errors by VE's/VEC's

October	1987	1988	1989
Defect. Applications	1.7%	0.6%	0.3%
Late Filed Sessions	1.4%	0.7%	1.2%
Defective Reports	9.7%	1.1%	0.4%

***Note:** The FCC previously considered ARRL, W5YI and DeVry to be 13 VEC's each since VEC's initially were appointed on a regional basis. Since any VEC can now coordinate examinations in any region, the FCC reduced the number of VEC Regions (62) to VEC Organizations (18). We have adjusted 1987 and 1988 figures to reflect this change.

Source: Pers.Rad.Branch/FCC; Washington, D.C.

AMATEUR RADIO CALL SIGNS

...issued as of the first of October 1989:.

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tech/Gen	Gp."D" Novice
0	WX0Y	KF0GC	N0LFA	KB0FJN
1	NZIP	KC1QW	N1HBP	KA1UQD
2	WU2H	KE2QE	N2KAM	KB2ISS
3	NX3G	KD3PV	N3HPO	KA3VHS
4 (*)	AB4RM	KM4ZZ	N4XHB	KC4MZT
5 (*)	AA5OQ	KG5ZR	N5PNP	KB5KXU
6 (*)	AA6SA	KK6BZ	N6WUU	KC6GQO
7 (*)	AA7CF	KF7XY	N7NTQ	KB7IWN
8	WX8A	KF8CE	N8LMP	KB8IIT
9	WM8F	KE9ST	N9JAI	KB9DNF
N. Mariana Is.	AH0H	AH0AF	KH0AM	WH0AAL
Guam	KH2K	AH2CF	KH2EG	WH2AMH
Johnston Is.	AH3B	AH3AD	KH3AB	WH3AAC
Midway Island		AH4AA	KH4AD	WH4AAG
Palmyra/Jarvis	AH5A			
Hawaii	(**)	AH6KB	NH6VC	WH6CFU
Kure Island			KH7AA	
Amer. Samoa	AH8D	AH8AD	KH8AH	WH8AAZ
Wake Wilkes Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7LP	NL7SV	WL7BVU
Virgin Islands	NP2F	KP2BR	NP2DK	WP2AGZ
Puerto Rico	(**)	KP4QJ	WP4WZ	WP4IPE

NOTE: * = All 2-by-1 format call signs have been assigned in the 4th, 5th, 6th and 7th radio districts. 2-by-2 format call signs from the AA-AL prefix block now being assigned to Extra Class amateurs. ** = All Group "A" (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" run out. ["N" 1x3 call signs will be running out in the 4th and 6th call areas shortly. When this happens, the FCC will be issuing 2x3 Group "D" call signs to Technician and General Class amateurs.]

Source: FCC Licensing Div., Gettysburg, PA

A group calling itself the *Vermont Section Manager Selection Committee* is unhappy with the recent appointment of ***Frank Suitor, W1CTM,*** as SCM. They charge that Suitor was appointed by the League's Membership Services Manager to fill the office left vacant by ***Jon Maguire, N1CQE,*** who was appointed to fill the office left vacant by ***Pete Drexel, AE1T,*** who was the only nominee in the 1988 Vermont SM election. "In each case, the outgoing SM recommended his replacement to the ARRL, who made the appointment. All three people are good friends and members of the same radio club." The group has filed a recall petition with the League and are supporting ***Brian Justin, WA1ZMS*** for the Section Manager slot.

● **We received a letter and photo from *Oleg Novichkof, UA9YX,*** in West Siberia telling us that the QSLs for his ***R0Y/UA9YX*** and ***R0Y/RA9YZ*** operation October 9-19 (Zone 23, Obl. 159) had not yet been printed, but he will do so in December. Oleg asks that amateurs not send follow up requests for cards. Direct address for QSLs: Box 1371 Barnaul 656014 USSR. He asks 2 IRC's or US $1 for return postage. Oleg's handwritten letter was written November 16th and arrived November 22nd.

● **We also received a letter from *R. N. Copeland ZL2AKV,*** General Secretary of the NZART, *New Zealand Association of Radio Transmitters,* requesting the U.S. amateur radio question pools. They want them as research material to assist in preparing their question banks. NZART is setting up an examination division in preparation to run New Zealand radio amateur examinations from January 1, 1990.

● ***Warning note from the Canadian Amateur Radio Federation News Service:*** Amateurs visiting children as Santa Claus should be aware of the danger to sensitive hospital electronic equipment from radio frequency emissions. Check with authorities to be safe.

● ***The Kenwood Newsletter*** advises that the Trio/Kenwood User's Net meets each Sunday at 2000Z on 14.317 MHz +/-5KHz for an exchange of information.

● ***More than 40 international companies*** from Spain, France, Italy, Hong Kong, Holland, England and the United States beat the mid-September deadline for filing an application to participate in the digital *Personal Communications Network* being planned for the United Kingdom. (See related story, Page 10) PCN phones will offer a combination home-and-office alternative to wired-and-cellular service using the 1.7 to 2.2 GHz band. Due to smaller cell sites, the UK plans 30,000 cell sites vs. 450 standard cellular locations. According to research, pocket-size phones with internal antennas will sell for around $160 by the mid-1990's with usage increasing to 12 million British users within ten years. *(Radio Communications Report, 10/9/89)*

● ***The FCC has received its first request*** for a frequency allocation for CT2 (Second generation Cordless Telephony) in the United States. Cellular 21 petitioned the FCC to allocate one megahertz at 940-941 MHz for nationwide CT2 use. An experimental license has already been granted by the Commission to test CT2 in Elmira, NY. The wireless one-way calling requires users to be within 600 yards of a public telepoint which is connected to the wireline telephone system. *(Radio Communications Report, 10/9/89)*

● ***VCR's and cable continue to blanket the countryside.*** Salisbury, MD, and Reno, NV, report more than 85% penetration! More than 61 million homes (about 68%) have VCRs ...up 12% from last year. Fifty million U.S. households (55%) are now hooked into cable TV. Palm Springs, CA, home of Mayor Sonny Bono, leads the nation in the category with 87% of its homes wired up. *(Marketing Week, 10/9/89)*

● ***Conversation at a White House state dinner*** honoring Italian president Francesco Cossiga turned to his hobby, ham radio. In his toast, President Bush joked about his incognito on-the-air name of Andy Capp. Cossiga said he borrowed it from the comic strips. He explained that he was not the only politician who liked communicating on the airwaves; ***Jordan's King Hussein (JY1)*** and ***Barry Goldwater (K7UGA)*** are others. Cossiga's call sign is ***I0FCG.*** Few who communicate with "Andy" realize their QSO is with the president of Italy. *(Washington Post 10/12/89)*

● ***Due to cost considerations,*** at least two Bell operating companies are considering running fiber to residential curbside "pedestals" rather than into private homes. This will allow up to 24 families to be hooked into a fiber optic telephone network via twisted pair copper or coaxial cable drops. The system could be upgraded later to all fiber by moving the optoelectronics from the pedestal location to the side of a home. This would allow all-digital video, voice and data services to the home by the year 2000. *(Multichannel News 11/20/89)*

● ***GTE Laboratories has developed a telephone switch*** that can distibute as many as 64 channels of broadcast quality video channels over fiber optic or coaxial cables. It also allows live or re-corded video transfer between telephones. GTE will test the system next year in Cerritos, Calif., where they are conducting a five year voice, data and video services experiment. *(Electronic Media 11/13/89)*

● ***"Spectrum will no longer be in short supply*** [in the year 2001] because broadcast television will be delivered to homes through fiber optics, along with a host of other shopping, data and business services. The freed spectrum then will be recycled for use in a radio-based network addressing personal communications needs." Quote from Jesse Russell, director of the cellular telecommunications lab for AT&T Bell Laboratories. "Cellular is the the future in personal communications. Development of two key technologies - fiber optics and cellular radio - will spur development of a complex multi-faceted communications network." Russell is organizing a standards committee for personal radiotelephones in the United States. Conventional cellular could view microcell technology as a competitive threat and hinder rather than promote its development. *(Radio Communications Report 10/23/89)*

● ***Zenith gambled away its successful computer division*** in order to focus on consumer electronics biggest question mark, High Definition TV. No U.S. firm has been successful at consumer electronics, but Zenith thinks they have a shot at it. The Japanese are already marketing HDTV and are way ahead in the new technology. The $635 million sale of their computer business to Group Bull of Paris will allow Zenith to develop what they hope will be the U.S. HDTV standard. The deal

want to know about amateur radio license tests, amateurs ... license examination. Also complete ... SATISFACTION GUARANTEED ... THE W5YI GROUP ... P.O. Box 565... Dallas, TX 73356 ... tests under the Novice and VE/VEC System. Over 200 pages! ...and Technician - Extra Class tests.

makes Bull, a $5.3 billion multinational, the largest European computer company. *(Electronic Media, PC Week, Marketing Week.)*

● ***Former chief of the FCC's Mass Media Bureau, Alex "Lex" Felker, (Extra Class/N4LF*** of Springfield, VA) has joined the law company of *Wiley, Rein & Felding* - the firm that represented United Parcel in the 220-222 MHz takeaway. He will be a technology/engineering consultant. *(Broadcasting Magazine 10/30/89)*

● ***BULLETIN:*** We understand that on Tuesday, November 28th (too late for our deadline) the FCC will adopt ***proposed rules for the transfer of 220-222 MHz*** to the Land Mobile Service. We will be at that meeting ...coverage in detail in our next issue.

● ***President Bush will nominate Ervin Duggan*** as the fifth FCC commissioner, for a 5-year term. Duggan is chairman of a Presbyterian religious foundation, was a speechwriter for LBJ, and was a director of art and history projects at the Smithsonian Institution. The nomination has not yet been officially named ...and, of course, he will have to go through a confirmation hearing.

● ***Combining the best of the telephone, modem and computer,*** Intelligent Technology Corp. has developed a state-of-the-art cellular radio laptop. The "rubber duckie" equipped $7,500 computer sends and receives data over the cellular network without a telephone connection. Just open it up and send data anywhere! *(Entrepreneur Magazine, Nov. 1989)*

● ***A radio-based stolen vehicle recovery system*** has been allocated 173.075 MHz throughout the country by the FCC. The frequency, just below TV channel 7, is shared with the federal government. One system, (Lo-Jack) consists of a $595 Motorola transceiver installed in the customers vehicle, radio tracking equipment ($2500) in police cars and a computerized network of transmitters with a power limit of 300 watts. When a Lo-Jack-equipped auto theft is reported, base station transmitters send out a coded signal that activates the transceiver of matching identification in the stolen vehicle, which in turns puts out its own signal that law enforcement officers can follow. *(Radio Communications Report 10/23/89)*

● ***Richard Harrison, owner of COM-TEK,*** an electornics store in Manassas, Virginia, was convicted of sell-ing illegal CB linear amplifiers and non-type accepted CB transmitters on November 2. He would found guilty by the a jury in the U.S. District Court for the Eastern District of Virginia. He could receive fines up to $100,000 and/or one year in prison. *(FCC Public Notice 11/9/89)*

● ***After obtaining a search warrant*** on Sept. 21, 1989, FCC engineers and U.S. Marshalls siezed an estimated $75,000 worth of illegal CB transceivers and linear amplifiers from *Andy's Place* (also known as *A&M Wholesale Supply)* in Pass Christian, Mississippi. Some of the linear amplifiers were capable of increasing CB power to over 2,000 watts. (CB stations are limited to 4 watts of power.) Andrew H. McAdams, Jr., is facing criminal prosecution. The case is being handled by Jay Golden, Asst. U.S. Attorney, Biloxi, Mississippi. *(FCC Public Notice 11/9/89)*

● ***Nearly 10% of the nation's 2 million pay phones*** are privately owned. Entrepreneurs, taking advantage of the 1984 FCC deregulation of AT&T's Bell System, are making a pitch for the $8 billion spent at pay phones. A well-located single pay phone can generate $4,000 to $5,000 a year. Smart phones can even verify credit card calls without routing to an operator ...thus avoiding the use of costly and controversial Alternate Operator Services. Credit card charges are captured on a diskette and forwarded to the issuer of the credit card so that the phone's owner can receive payment. Charges to the caller soar when AOSs get involved and Congress is urging legislative restraints on them. *(High Technology Business, Nov./Dec 1989)*

● ***Bob McKay/N8ADA,*** Chairman of the ***DARA Scholarship Committee*** writes: "The *Dayton Amateur Radio Association* will accept applications for the 1990 Scholarship Program after January 1, 1990. Licensed amateurs graduating from high school in 1990 are eligible. There are no restrictions on license class or course of study. This year, five $1,500 scholarships will be awarded. For further information and application forms write: *DARA Scholarships, 317 Ernst Avenue, Dayton, OH 45405.*

● ***What is a "Wait State?"*** You see "0 wait" or "1 wait" state in computer ads, but do you know what it refers to? It is the delay between the time a signal is applied to the input of a logic gate and the time it is noted on that gate's output measured in "clock cycles." As computers get faster, slower parts external to the CPU chip cause the processor to wait (or not wait) one clock cycle thus somewhat slowing down the overall operation of the computer. The delay exists only, however, when accessing slower parts of the computer - most of the time the CPU is operating at full speed. *(ACGNJ News, Nov. 1989)*

● ***Ruben D. Ortiz, N5NEH,*** of Corpus Christi, Texas, has been fined $300 by the FCC for "...attempting to obtain an amateur service license by fraudulent means." Ortiz qualified for the General Class operator license on August 13, 1988, at a W5YI-VEC coordinated test session. Mr. Ortiz submitted a new application for upgrade to the Advanced Class on June 19, 1989, with a falsified Certificate of *Successful Completion of Examination* (CSCE) attached. He stated that he had passed Element 4(A) the previous August but was issued a General Class operator license in error. The supporting CSCE was an altered photocopy of the original August 13th certificate. The falsified certificate indicated that Ortiz had passed the examination for the Advanced Class when in reality he was not examined. The $300 payment was due November 30th.

● ***Levon Amdilyan of the Moscow-based International***

AMECO LICENSE PREPARATION MANUALS - Contain all Amateur Radio examination questions, multiple choices, correct answer iden-

NOVICE AMATEUR RADIO COURSE - Complete with 2 cassette Morse

Computer Club had some interesting things to say about Soviet computing. South Korea, Taiwan, China and Hong Kong are supplying computers and software to the USSR, although some are being assembled in the USSR. Only a half a million PCs are installed ...mostly IBM compatibles. The first Soviet built PC/XTs were produced in 1987 when 50,000 were produced; 330,000 PC's will be produced this year. Quality of high-density floppy drives is not good, ...there are no color monitors ...hard disks have maximum 10 MB. Biggest problem is the amount of money that may be taken out of the Soviet Union by foreign firms which greatly limits their importation. "There is a great need for PCs nearly everywhere in the U.S.S.R, most of all in the education, finance and manufacturing sectors. Glasnost sharply revealed the shortage of PCs ...and necessity for introducing them in the U.S.S.R." *(Computer Reseller News 10/23/89)*

● ***The British DTI, (Dept. of Trade and Industry)*** has lifted the requirement to apply for an export license to ship many computers from the United Kingdom to any destination. This relaxation applies to most 16-bit personal computers or their equivalent. An export license is still needed to export full 32-bit PCs ...such as those with an Intel 80386 micro-processor chip. *(DTI Press Notice 10/31/89)*

● ***"Hacker Non-Threat"*** - Computer hackers receive lots of headlines, but they aren't the real threat to corporate America. Hacker intrusions are less of a security problem than the everyday employee who is knowledgeable enough to bypass normal security measures. *(Technology Review Dec. 1989)*

● ***"Open Sesame" ...spoken passwords!*** Personalized "Smart Cards," trained to respond only to their owner's voice, could boost credit card security and increase access card effectiveness. Instead of keying in personal ID numbers, a speaker verification system compares the owners unique speech patterns with those digitally stored on the card. *(Comm. News Nov. 1989)*

● ***Camcorders acounted for the biggest increase in 1989*** home entertainment equipment sales. Full size VHS is the most popular camcorder format by far ...with a 63% share. (Other formats: 8mm 12%, VHS-C 11%, S-VHS-C 7% and Beta 6%.) The Electronics Industries Association says the median price for a camcorder is $1,053. *(Video Review Dec. 1989)*

● ***Atari has a new palm-sized full keyboard computer*** that weighs <u>less than a pound.</u> The $399 ***"Portfolio"*** PC uses MD-DOS command-compatible software. Atari plans a $4 million advertising campaign to drive home the fact that it is a complete computer and not an "electronic organizer." *(Marketing Week 11/6/89)*

● ***It appears we have a new version of Form 610*** "Application for Amateur Radio Station and/or Operator License" being released soon. The FCC in Gettysburg announced that it has submitted a revised Form 610 to the Office of Management and Budget for review and clearance as required under the Paperwork Reduction Act of 1980. We will try and tell you about the new form in our next issue. The current Form 610 carries a December 31, 1989 expiration date. *(FCC Public Notice 11/20/89)*

● You will remember we told you that the ***Federated States of Micronesia*** had been added to the list of countries that now have third party traffic agreements with the U.S. We weren't sure where the country was located. ***Mike Reynolds, W0KIE,*** (former operator of KG6AAY Naval Communications Station in Guam) writes, "Micronesia is the U.S. Trust Territory for islands in the area of Guam."

● ***Warning notice from the RSGB, Radio Society of Great Britain.*** "Preparations for the next ITU World Administrative Radio Conference now set for 1992, have been discussed internationally and by the Society during the year. Though the ITU Conference in Seville, Spain, in 1992 is yet without an agenda, it is to be expected that several of the key amateur bands might be under some threat. Hence the need for vigilance, proper preparation and the need for unity of purpose both nationally and internationally." *(RSGB's Radio Communication Magazine, Nov. 1989)*

● The *Western Washington Amateur Television Society* and *Amateur Television Quarterly Magazine* are holding an ***Amateur Television Video Tape Contest.*** First prize is an ICOM IC-1275 1.3 GHz transceiver, second prize: AEA FS430 ATV transceiver, third prize: PC Electronics RX Converter. All licensed amateurs are eligible. The video tape, not to exceed 15 minutes in length, can be on any ham radio subject (documentary, educational, technical or entertainment) and must have been produced since May 1988. Send entry to: *Video Contest, 353 S. 116th St., Seattle, WA 98168.*

● ***Buckmaster Publishing has all 500,000 U.S. radio amateurs*** available, searchable by call sign, name, address, city, state, zip code or license class on a single CD-ROM. A $499.95 package includes the CD-ROM data disc, a Sony CDU-6100 external CD-ROM drive with interface card for IBM-PC/AT type computers and MS-DOS CD-ROM software. (Requires 640k RAM, hard drive and MS-DOS 3.1 or later version.) Call: 1-800-282-5628

● Likeable ***James Spann, WO4W, is back in the TV weather business*** at WBRC-TV Channel 6 in Birmingham. Spann was weather anchor for KDFW-TV in Dallas from 1984-86 before moving to Demopolis, Alabama, and becoming president of South Star Communication Corporation which owns WZNJ-FM and WXAL-AM radio. Spann will not seek re-election as Alabama Section Manager.

● ***The <u>§Part 97 Amateur Radio Rulebook</u>*** that we recently published ***is selling "<u>great!</u>"*** We have already shipped over 7,800 copies! A second *(newly updated)* edition has just been received from the printer. Cost is: **$2.95** postpaid from: **W5YI, P.O. Box 565101, Dallas, TX 75356.** Order your copy ***<u>today!</u>***

NORTH POLE NETWORK TO BE FEATURED

For years, ham clubs around the country have made it possible for hospitalized children and adults to talk directly to Santa Claus at the North Pole via ham radio ...taking advantage of the excellent propagation to the north during December. Despite these hundreds of Santa QSOs and other evidence, some people still don't believe in the existence of Santa.

To put the matter to rest, *Group W Productions* sent out a team of investigative reporters, looking for conclusive proof about Santa. One of the places they visited was WD6BPT, club station of St. Jude Hospital and Rehabilitation Center of Fullerton, California during their ***North Pole Network*** activities. Over the past 13 years, hundreds of children and adults have been introduced to our hobby through the weekly *Rehab Radio Program* at St. Jude, founded by ***April Moell, WA6OPS.*** Every December, patients talk directly to Santa via ham radio from WD6BPT.

The result of the investigation is a special holiday television show called ***"There really is a Santa Claus"*** produced by David Lowe and narrated by Jack Perkins. The program is airing around the country at various times during the holiday season. Check your local listings.

NEW PERSONAL COMMUNICATIONS NETWORK PROPOSED

It had to happen sooner or later -- the news of CT-2 (Cordless Telephone 2) and related new personal communication systems being established in England *(see July 15 W5YI Report)* had to have an impact in the U.S. Millicom Inc., an international developer of cellular telephone systems, has petitioned the FCC to allocate spectrum in the 1.7 - 2.3 GHz range to a super pocket telephone system known as the ***Personal Communications Network*** (PCN), RM-7175.

According to Millicom, "PCN offers personalized communications, totally portable by the user, wherever he or she may be, and additionally offers the unique ability to call a person without knowledge of his or her location, if the called person has notified the system that he or she will receive calls from any or selected callers."

This nationwide system would undoubtedly cost hundreds of millions of dollars to fully deploy. To offer the extreme capacity that would be required by millions of users, Millicom turned to two exotic technologies: microcellular and spread-spectrum.

Microcells are small coverage areas provided by low-height, low-power base stations. Small cells mean that the same frequencies can be reused many times across a service area, increasing spectrum efficiency (and complexity).

"Base stations may be established on separate floors of office buildings, along pedestrian walkways, and within residential neighborhoods. Microcells are designed to serve people wherever they are, not just primarily those on the move in vehicles," the company said.

Spread-spectrum is the advanced, jam-resistant modulation technique developed for military uses. Spread spectrum spreads the power of the signal over a wide band instead of concentrating it in a small frequency range as is the conventional practice. This results in a low signal to noise ratio, low detectability and increased immunity to intentional and unintentional interference and fading effects. No large-scale consumer use of spread-spectrum telephones has ever been accomplished.

Various government and nongovernment services share the 1.7 - 2.3 GHz band. Millicom suggested that PCN could share spectrum with these users: "Spread spectrum offers significant possibilities for addressing our nation's serious problem of frequency scarcity -- it may be the key to more efficient frequency usage through sharing. Without evidence, it cannot be assumed that spread-spectrum causes interference in a microcell environment."

We believe that the FCC will integrate the Millicom petition into a comprehensive *Notice of Inquiry* that it is preparing into the whole question of future cordless telephone standards in the U.S. The petition raises, but does not answer, many questions about licensing and eligibility for the new service.

Should it be authorized, the FCC may again face many thousands of applications as it has in the past when it authorized new communications services. If it is authorized, the cellular telephone companies of America will have a formidable and capable competitor in the form of a small pocket communicator with lower cost and more advanced features. But will it beat ham radio...?